



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,967	01/28/2004	Kazuo Kayamoto	1924.69310	4313
7590 Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606		01/29/2007	EXAMINER VAUTROT, DENNIS L	
			ART UNIT 2167	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/29/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/766,967	KAYAMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dennis L. Vautrot	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 October 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 28 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/16/2006</u>  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The applicants' amendment, filed 16 October 2006, has been received, entered into the record and considered.
  
2. As a result of the amendment, claims 1 – 3, 8 – 10, and 15 - 18 are amended. Claims 1 – 18 are pending in the application.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1 – 18 have been considered but are moot in view of the new ground(s) of rejection.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 16 October 2006 has been received and entered into the record. Since the IDS comply with the provisions of MPEP § 609, the references cited therein have been considered by the examiner. See attached form PTO-1449.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 – 5, 7 – 12 and 14 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Prompt et al.** (US 2006/0020586) in view of **O'Flaherty et al.** (US 2001/0011247).

7: Regarding claim 1, **Prompt et al.** (hereinafter **Prompt**) teaches a database management apparatus that performs a search of data from a database based on predetermined information selected by a user from among information registered as a dictionary (See page 3, paragraph [0022] "...users can search and/or browse the virtual directory to find the data needed or they can query the directory with simple commands to search for the information needed."), the database management apparatus comprising:

a personal dictionary registering unit that registers information on either of or both management and analysis of the data stored in the database to the dictionary as a personal dictionary that is accessible only by a predetermined user (See page 16, paragraph [0172]), and

a dictionary reference unit that outputs the information registered in the dictionary including the information registered as the common dictionary and the personal dictionary (See page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process...the user can provide input information so that the first module modifies the definition of the schema, by having the

fourth module create new schema mapping, that is, where the VDS maps database objects such as tables, columns, attributes, and other entities into LDAP object classes and attributes."), and accepts a selection of the predetermined information by the user from among the information output (See page 15, paragraph [0171] "Accordingly, the first module accepts user selection of an Object from the corresponding schema previously selected. Furthermore, the user may select attributes to retain for each Object, and may define other restrictions.");

**Prompt** does not explicitly disclose a personal table storing unit that stores data as personal data [dataviews] in the database storing common data to each user;

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and a searching unit that performs a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

However, **O'Flaherty et al.** (hereinafter **O'Flaherty**) discloses a personal table storing unit that stores data as personal data [dataviews] in the database storing common data to each user (See O'Flaherty page 2, paragraph [0034] ("One important capability of a database management system is the ability to define a virtual table and save that definition in the database as metadata with a user-defined name. The object formed by this operation is known as ...dataviews."));

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary (See

O'Flaherty, page 2, paragraph [0034] "Metadata about the privacy dataviews (including the dataview name, names and datatypes of the dataview columns, and the method by which the rows to be derived) is stored persistently in the databases metadata, but the actual data presented by the view is not physically stored anywhere in association with the derived table."); and

a searching unit that performs a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.(See O'Flaherty, page 4 paragraph [0056] "Second, unlike systems which execute SQL queries as a series of selections to narrow the data down to the dataview subset, the TERADATA database management system rewrites dataview-based queries to generate the SQL that selects the necessary columns directly from the appropriate base tables.")

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the references because both involve using schema and metadata of their respective databases to control access to the data and by including the personal table as disclosed in **O'Flaherty**, the apparatus is capable of being more secure by allowing privacy rules to be enforced over the tables (See **O'Flaherty**, page 2, paragraph [0034]). It is for this reason that one of ordinary skill in the art would have been motivated to include a personal table storing unit that stores data as personal data [dataviews] in the database storing common data to each user; wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and a searching unit that performs a search of data

from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

8. Regarding claims 2, 9, and 16, the combination of **Prompt** and **O'Flaherty** additionally discloses the personal table storing unit that stores data obtained as a result of the search (See **Prompt** page 15, paragraph [0168] "In FIG. 14a, a user working at a client application selects a relational data source. In response to the selection made, schema extraction of the objects and relationships, is made by the module."), and the personal dictionary registering unit registers information on either of or both management and analysis of the data stored at the personal table storing unit as the personal dictionary that is accessible only by a user who made a request for the search (See **Prompt** page 15, paragraph [0172] "...a default directory view may be created automatically... a schema output as a result of the schema mapping and schema manager modules... can be selected by the user...the directory view is generated... Thereafter, the definition is saved in a directory view file.")

9. Regarding claims 3, 10, and 17, the combination of **Prompt** and **O'Flaherty** additionally discloses

the personal table storing unit stores, upon the database management apparatus receiving a request to store data having a predetermined file format, the data having the predetermined file format to the database (See **Prompt** page 16, paragraph [0176]

"One type of configuration that works suitably well with the present invention comprises encoding the captured schema with an Internet markup language like, for example Extensible Mark-up language (XML). Once the schema is formatted with XML, the encoded metadata is then stored in a schema file." XML was given in the specification as an example of a predetermined file format.), and

the personal dictionary registering unit registers information on either of or both management and analysis of the data stored by the file storing unit as the personal dictionary that is accessible only by a user who made the request (See **Prompt** page 16, paragraph [0176] "For example, the schema file may be stored with an .orx file extension representing the Objects and relationships expressed (e.g. encoded) in XML, primarily for convenience and ease of system administration." The schema referred to here represents information on management and analysis of the stat stored by the storing unit.)

10. Regarding claims 4 and 11 the combination of **Prompt** and **O'Flaherty** additionally discloses the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register information on a predetermined operation applied to the data of the database, the information on the predetermined operation to the personal dictionary that is accessible only by a user who made the request (See **Prompt** page 7, paragraph [0098] "This requires selecting one or more tables that are stored in a database, and combining the tables using any valid sequence of relational operations to obtain a view." And see **O'Flaherty** page 7,

paragraph [0088] "...and of the associated user/user group privileges."), and the dictionary reference unit outputs the information registered in the dictionary including the information on the predetermined operation registered, and accepts the selection of the predetermined information by the user from among the information output (See **Prompt** page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process. As will be illustrated subsequently in the context of a graphical user interface, the user can provide input information so that the first module modifies the definition of the schema...").

11. Regarding claims 5 and 12, the combination of **Prompt** and **O'Flaherty** additionally discloses the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register information on a link between the data of the database, the information on the link to the personal dictionary that is accessible only by a user who made the request (See **Prompt** page 9, paragraph [0115] "The virtual directory establishes a link between the two types of customer records and aggregates their data without changing the view.... In particular, the link between the two types of customer records is an ad hoc join."), and the dictionary reference unit outputs the information registered in the dictionary including the information on the link registered, and accepts the selection of the predetermined information by the user from among the information output (See **Prompt** page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process. As will be illustrated subsequently in the context of

a graphical user interface, the user can provide input information so that the first module modifies the definition of the schema...").

12. Regarding claims 7 and 14, the combination of **Prompt** and **O'Flaherty** additionally discloses the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register management point information on either of or both management and analysis of the data stored in the database, management point information to the personal dictionary that is accessible only by a user who made the request (See **Prompt** page 28, paragraph [0319] where customers are linked to products and order details), and the dictionary reference unit outputs the information registered in the dictionary including the management point information registered, and accepts the selection of the predetermined information by the user from among the information output (See **Prompt** page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process. As will be illustrated subsequently in the context of a graphical user interface, the user can provide input information so that the first module modifies the definition of the schema...").

13. Regarding claim 8, **Prompt** teaches a database management method to perform a search of data from a database based on predetermined information selected by a user from among information registered as a dictionary, (See page 3, paragraph [0022] "...users can search and/or browse the virtual directory to find the data needed or they

can query the directory with simple commands to search for the information needed."),  
the database management method comprising:

registering information on either of or both management and analysis of the data stored in the database to the dictionary as a personal dictionary that is accessible only by a predetermined user (See page 16, paragraph [0172]), and

outputting the information registered in the dictionary including the information registered as the common dictionary and the personal dictionary (See page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process...the user can provide input information so that the first module modifies the definition of the schema, by having the fourth module create new schema mapping, that is, where the VDS maps database objects such as tables, columns, attributes, and other entities into LDAP object classes and attributes."), and accepts a selection of the predetermined information by the user from among the information output (See page 15, paragraph [0171] "Accordingly, the first module accepts user selection of an Object from the corresponding schema previously selected. Furthermore, the user may select attributes to retain for each Object, and may define other restrictions.");

**Prompt** does not explicitly disclose storing data as personal data [dataviews] in the database storing common data to each user;

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

However, O'Flaherty discloses storing data as personal data [dataviews] in the database storing common data to each user (See O'Flaherty page 2, paragraph [0034] ("One important capability of a database management system is the ability to define a virtual table and save that definition in the database as metadata with a user-defined name. The object formed by this operation is known as ...dataviews."));

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary (See O'Flaherty, page 2, paragraph [0034] "Metadata about the privacy dataviews (including the dataview name, names and datatypes of the dataview columns, and the method by which the rows to be derived) is stored persistently in the databases metadata, but the actual data presented by the view is not physically stored anywhere in association with the derived table."); and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.(See O'Flaherty, page 4 paragraph [0056] "Second, unlike systems which execute SQL queries as a series of selections to narrow the data down to the dataview subset, the TERADATA database management system rewrites dataview-based queries to generate the SQL that selects the necessary columns directly from the appropriate base tables.")

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the references because both involve using schema and metadata of their respective databases to control access to the data and by including the personal table as disclosed in **O'Flaherty**, the apparatus is capable of being more secure by allowing privacy rules to be enforced over the tables (See **O'Flaherty**, page 2, paragraph [0034]). It is for this reason that one of ordinary skill in the art would have been motivated to include storing data as personal data [dataviews] in the database storing common data to each user; wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

14. Regarding claim 15, **Prompt** teaches a computer program for managing a database to perform a search of data from a database based on predetermined information selected by a user from among information registered as a dictionary, (See page 3, paragraph [0022] "...users can search and/or browse the virtual directory to find the data needed or they can query the directory with simple commands to search for the information needed."), the computer program making a computer execute:  
registering information on either of or both management and analysis of the data stored in the database to the dictionary as a personal dictionary that is accessible only by a predetermined user (See page 16, paragraph [0172]), and

outputting the information registered in the dictionary including the information registered as the common dictionary and the personal dictionary (See page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process...the user can provide input information so that the first module modifies the definition of the schema, by having the fourth module create new schema mapping, that is, where the VDS maps database objects such as tables, columns, attributes, and other entities into LDAP object classes and attributes."), and accepts a selection of the predetermined information by the user from among the information output (See page 15, paragraph [0171] "Accordingly, the first module accepts user selection of an Object from the corresponding schema previously selected. Furthermore, the user may select attributes to retain for each Object, and may define other restrictions.");

**Prompt** does not explicitly disclose storing data as personal data [dataviews] in the database storing common data to each user;

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

However, **O'Flaherty** discloses storing data as personal data [dataviews] in the database storing common data to each user (See **O'Flaherty** page 2, paragraph [0034] ("One important capability of a database management system is the ability to define a

virtual table and save that definition in the database as metadata with a user-defined name. The object formed by this operation is known as ...dataviews.");

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary (See O'Flaherty, page 2, paragraph [0034] "Metadata about the privacy dataviews (including the dataview name, names and datatypes of the dataview columns, and the method by which the rows to be derived) is stored persistently in the databases metadata, but the actual data presented by the view is not physically stored anywhere in association with the derived table."); and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.(See O'Flaherty, page 4 paragraph [0056] "Second, unlike systems which execute SQL queries as a series of selections to narrow the data down to the dataview subset, the TERADATA database management system rewrites dataview-based queries to generate the SQL that selects the necessary columns directly from the appropriate base tables.")

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the references because both involve using schema and metadata of their respective databases to control access to the data and by including the personal table as disclosed in O'Flaherty, the apparatus is capable of being more secure by allowing privacy rules to be enforced over the tables (See O'Flaherty, page 2, paragraph [0034]). It is for this reason that one of ordinary skill in the art would have

been motivated to include storing data as personal data [dataviews] in the database storing common data to each user; wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

15. Regarding claim 15, **Prompt** teaches a computer-readable recording medium for storing a computer program for realizing a database management to perform a search of data from a database based on predetermined information selected by a user from among information registered as a dictionary, (See page 3, paragraph [0022] "...users can search and/or browse the virtual directory to find the data needed or they can query the directory with simple commands to search for the information needed."), the computer program making a computer execute:

registering information on either of or both management and analysis of the data stored in the database to the dictionary as a personal dictionary that is accessible only by a predetermined user (See page 16, paragraph [0172]), and

outputting the information registered in the dictionary including the information registered as the common dictionary and the personal dictionary (See page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process...the user can provide input information so that the first module modifies the definition of the schema, by having the fourth module create

new schema mapping, that is, where the VDS maps database objects such as tables, columns, attributes, and other entities into LDAP object classes and attributes."), and accepts a selection of the predetermined information by the user from among the information output (See page 15, paragraph [0171] "Accordingly, the first module accepts user selection of an Object from the corresponding schema previously selected. Furthermore, the user may select attributes to retain for each Object, and may define other restrictions.");

**Prompt** does not explicitly disclose storing data as personal data [dataviews] in the database storing common data to each user;

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

However, **O'Flaherty** discloses storing data as personal data [dataviews] in the database storing common data to each user (See **O'Flaherty** page 2, paragraph [0034] ("One important capability of a database management system is the ability to define a virtual table and save that definition in the database as metadata with a user-defined name. The object formed by this operation is known as ...dataviews."));

wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary (See **O'Flaherty**, page 2, paragraph [0034] "Metadata about the privacy dataviews (including the dataview name, names and datatypes of the dataview columns, and the method by

which the rows to be derived) is stored persistently in the databases metadata, but the actual data presented by the view is not physically stored anywhere in association with the derived table."); and

performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.(See O'Flaherty, page 4 paragraph [0056] "Second, unlike systems which execute SQL queries as a series of selections to narrow the data down to the dataview subset, the TERADATA database management system rewrites dataview-based queries to generate the SQL that selects the necessary columns directly from the appropriate base tables.")

It would have been obvious to one with ordinary skill in the art at the time of the invention to combine the references because both involve using schema and metadata of their respective databases to control access to the data and by including the personal table as disclosed in O'Flaherty, the apparatus is capable of being more secure by allowing privacy rules to be enforced over the tables (See O'Flaherty, page 2, paragraph [0034]). It is for this reason that one of ordinary skill in the art would have been motivated to include storing data as personal data [dataviews] in the database storing common data to each user; wherein the dictionary includes common information on either or both management and analysis of the data to each user as a common dictionary; and performing a search of data from a database storing the personal data and the common data based on the selection accepted by the dictionary reference unit.

16. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Prompt** in view of **O'Flaherty** as applied to claim 1 above, and further in view of **Scanlon** (5,850,480). The combination of **Prompt** and **O'Flaherty** teaches the dictionary reference unit outputs the information registered in the dictionary including the information on the composite field registered, and accepts the selection of the predetermined information by the user from among the information output (See page 15, paragraph [0169] "...a user is permitted to select a schema file which has been output from the schema extraction process. As will be illustrated subsequently in the context of a graphical user interface, the user can provide input information so that the first module modifies the definition of the schema...")

The combination of **Prompt** and **O'Flaherty** does not explicitly disclose the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register information on a composite field that is formed by combining a plurality of data fields of the database, the information on the composite field to the personal dictionary that is accessible only by a user who made the request.

However, **Scanlon** teaches the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register information on a composite field that is formed by combining a plurality of data fields of the database, the information on the composite field to the personal dictionary that is accessible only by a

user who made the request (See column 5, lines 40-44 "A composite field includes any group of simple fields which are related in that there is a commonality of subject matter of the information contained within such simple fields. Thus, each composite field consists of a plurality of related sub-fields.") It would have been obvious to one with ordinary skill in the art to combine the teachings of **Prompt** and **O'Flaherty** with the composite field teaching of **Scanlon** because of the searching advantage of having the related fields grouped together as discussed in **Scanlon**. It is for this reason that one of ordinary skill in the art would have been motivated to include the personal dictionary registering unit registers, upon the database management apparatus receiving a request to register information on a composite field that is formed by combining a plurality of data fields of the database, the information on the composite field to the personal dictionary that is accessible only by a user who made the request.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis L. Vautrot whose telephone number is 571-272-2184. The examiner can normally be reached on Monday-Friday 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cottingham can be reached on 571-272-7079. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dv  
18 January 2007



JOHN COTTINGHAM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100